

REMARKS

As an initial matter, Applicants acknowledge that Claims 14-18, 20-23, 41, 47, 69 and 95-101 are drawn to allowable subject matter, noting that Claim 96 has been objected to.

Claims 1, 4-8, 10-11, 14-18, 20-23, 41, 47, 69, and 95-101 are currently pending. Claims 2-3, 9, 12-13, 19, 24-40, 42-46, 48-68, 70-94, 96 and 102-103 have been canceled without prejudice or disclaimer. Applicants reserve the right to pursue the subject matter of the canceled claims in one or more divisional or continuation applications. Claims 5 and 10 have been amended herein. No new matter is added. Reconsideration of this Application is respectfully requested.

In the Office Action dated August 18, 2005, the Examiner set forth a number of grounds for rejection. These grounds are addressed individually and in detail below.

Double Patenting Rejection

Claims 95 and 96 stand rejected as substantial duplicates. In order to further prosecution of the instant case, Claim 96 has been cancelled herein, obviating this basis for rejection.

Rejection under 35 U.S.C. § 112, second paragraph.

Claims 5 and 10 stand rejected under 35 U.S.C. § 112, second paragraph, as allegedly being indefinite for failing to particularly point out and distinctly claim the subject matter which the applicant regards as the invention for the reasons set forth on page 3 of the Office Action.

Claim 5 has been amended such that it encompasses an isolated nucleic acid molecule of Claim 1, wherein one of the TPL nucleotide sequence comprises the sequence set forth in SEQ ID NO: 32. This meets the limitations of Claim 1(a) or 1(c).

Claim 10 has been amended such that it does not depend from Claim 1. Support for the amending language may be found in the claims as filed and in paragraph 166 of the published application, at least as follows:

The nucleic acid sequence of complementing plasmids are shown in SEQ ID NO: 43 for pDV60, SEQ ID NO: 44 for pDV67 and SEQ ID NO: 47 for pDV69, SEQ ID NO: 64 for pDV80 and SEQ ID NO: 65 for pDV90.

Applicants respectfully submit that the grounds for the 35 U.S.C. § 112, second paragraph rejections have been obviated by the amendments described above. Withdrawal of the rejection under 35 U.S.C. § 112, second paragraph, is respectfully requested.

Rejection under 35 U.S.C. § 102(b).

Claims 1, 4 and 11 are rejected under 35 U.S.C. § 102(b) as allegedly anticipated by Logan et al. (Proc. Natl. Acad. Sci. USA, 81:3655-3659 (1984)) as evidenced by Clark et al. (4,675,285).

Applicants respectfully disagree with the basis for this rejection. The Examiner correctly indicates that Logan et al. disclose plasmids pJAW43 and “sub 360-L1,2,3” which encode wild type adenovirus type 2 tripartite leader sequences. Furthermore, the Examiner correctly states that Logan et al. fails to disclose a native adenovirus intron between the TPL exons but Clark et al. discusses a second native intron within the Ad2 TPL sequence and, thus, it is evident that two introns exist within the Ad2 TPL and that Logan et al., teach three exons (L1,2,3) within the Ad2 TPL.

For anticipation under 35 U.S.C. § 102, the reference “must teach every aspect of the claimed invention either explicitly or impliedly. Any feature not directly taught must be inherently present.” (MPEP §706.02). “A claim is anticipated only if each and every element as set forth in the claim is found, either expressly or inherently described, in a single

prior art reference.” Verdegaal Bros. v. Union Oil Co. of California, 2 USPQ2d 1051, 1053 (Fed. Cir. 1987).

As evidenced above by the Examiner’s characterization of the cited references, neither Logan et al. nor Logan et al. as evidenced by Clark et al. discloses an isolated nucleic acid molecule comprising a first and second TPL exon wherein at least two of the different TPL exons are from different adenoviruses as required by Claim 1. Logan et al. and Clark et al., disclose TPL exons and introns solely from adenovirus serotype 2. None of the vectors constructed and disclosed in Logan et al. contain TPL exons from more than one adenovirus serotype.

Logan et al. nor Logan et al. as evidenced by Clark et al. disclose each and every element of Claim 1, or Claims 4 and 11 which depend therefrom. Hence there is no anticipation and the rejection under 35 U.S.C. § 102 should be withdrawn.

Rejection under 35 U.S.C. §103(a).

Claims 6-8 stand rejected under 35 U.S.C. § 103(a) as being unpatentable over Logan et al. as evidenced by Clark et al., as applied to Claims 1, 4 and 11, further in view of Curiel (US 5,871,727).

It is respectfully submitted that Curiel does not cure the deficiencies of the teachings of Logan et al. and Logan et al. as evidenced by Clark et al. As stated above, neither Logan et al. nor Logan et al. as evidenced by Clark et al. discloses an isolated nucleic acid molecule wherein at least two of the different TPL exons are from different adenoviruses as required by Claim 1.

To establish a *prima facie* case of obviousness the prior art reference (or references when combined) must teach or suggest all of the claim limitations. In re Vaeck, 20 USPQ2d 1438 (Fed. Cir. 1991) and MPEP § 2142.

None of the cited references teach or suggest using TPL exons and/or introns from more than one different adenovirus serotype in a single nucleic acid molecule, nor do they provide the motivation of replace one or more TPL exon with an exon from a different adenovirus. Curiel does not teach or suggest using TPL exons from different adenoviruses to arrive at the claimed nucleic acid molecule. Even if, *arguendo*, one of ordinary skill in the art would have been motivated to combine the TPL sequences of Logan et al. with the chimeric adenovirus gene of Curiel as alleged by the Examiner, one of ordinary skill in the art would not arrive at the claimed invention but, instead, would arrive at a nucleic acid molecule containing the only Ad2 TPL sequences and the chimeric fiber gene. Thus, the Examiner has failed to set forth a prima facie case of obviousness and the rejection should be withdrawn.

It follows that the cited references, alone or in combination, do not teach or suggest the claimed subject matter and the rejection under 35 U.S.C. § 103(a) should be withdrawn.

Conclusions

The Examiner is respectfully requested to enter the above amendments before commencement of substantive examination. If in the opinion of the Examiner, a telephone conference would expedite the prosecution of the subject application, the Examiner is invited to contact Applicants' counsel, Linda Judge at (415) 836-2586.

Respectfully submitted,

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